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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,638	02/24/2005	Martin Hofmeister	27392/26949	2118

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EXAMINER	
DESTA, ELIAS	

ART UNIT	PAPER NUMBER
2857	

MAIL DATE	DELIVERY MODE
12/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/525,638	HOFMEISTER, MARTIN	
	Examiner	Art Unit	
	Elias Desta	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,5,10-13,18-20 and 25-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4, 5, 10-13, 18-20 and 25-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Response to Amendment

1. Applicant's arguments with respect to claims 1, 4, 5, 10, 11-13, 18-20 and 25-34 have been considered but are moot in view of the new ground(s) of rejection.

Explanation of Rejection

Claim rejection – 35 U.S.C. 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 4, 5 10-13, 18-20 and 25-34 rejected under 35 U.S.C. 103(a) as being unpatentable over *Tsukahara et al.* (U.S. Patent 4,827,516, hereon *Tsukahara*).

In reference to claims 1 and 25: *Tsukahara* teaches a method of determining an envelope curve of a modulated input signal (see *Tsukahara*, Abstract and Fig. 1, 2A and 2B). The method comprises:

- Generating digital samples by digital sampling a modulated signal (see *Tsukahara*, column 10, lines 43-47);

- Generating Fourier-transformed samples by Fourier transforming the digital samples (see *Tsukahara*, Fig. 2B, Fourier-transform circuit);
- Generating sideband-cleared, Fourier-transformed samples by removing a range with positive frequencies from the Fourier-transformed samples (see *Tsukahara*, Fig. 2B, spectrum extractor);
- Generating inverse-transformed samples by inverse Fourier-transforming the sideband cleared, Fourier-transformed samples (see *Tsukahara*, Fig. 2B, section 114);
- Calculating the absolute value of the inverse-transformed samples, and displaying an envelope curve of the modulated input signal based on the absolute values of the inverse-transformed samples (see *Tsukahara*, Figs. 3 and 29).

Tsukahara does not disclose displaying an envelope curve of a modulated input signal; however, in Fig. 27, the Japanese word "ka" is characterized in a three-dimensional plane consisting of frequency, time and amplitude of a modulated input signal in time domain (see *Tsukahara*, column 15, lines 27-50 and Fig. 15A). Therefore, an ordinary skill in the art would have known displaying the envelope curve from the three-dimensional representation of SEP (t, f) signal. Further, since the requirement for removing the frequency samples requires either positive or negative frequency sample signals from Fourier-transformed digital samples, the absolute value circuit in Fig. 2B, section 115 would provide a non-negative frequency sample.

With regard to claims 4 and 26: *Tsukahara* further teaches that the system includes calculating the logarithms of the absolute values of the inverse-transformed samples relative to an effective value of the inverse transformed samples (see *Tsukahara*, Fig. 26 and column 21, lines 9-34).

With regard to claims 10 and 28: *Tsukahara* further teaches the method of generating sideband-cleaned, Fourier-transformed samples by moving a range with positive frequencies from the Fourier-transformed signal samples includes removing a level component at a zero frequency because the variable frequency is done as the middle point between the two closest peaks to the frequency cut that come out of the peak continuation (see *Tsukahara*, Figs. 18 and 18B).

With regard to claims 11, 18, 29 and 32: *Tsukahara* further teaches that the method includes processing the inverse-transformed samples further only in such limited range that a cyclic continuation, which is caused by the Fourier transform and inverse Fourier transform, is suppressed (see *Tsukahara*, Fig. 18A, which shows intermediate frequency values are suppressed).

With regard to claims 12, 19, 30 and 33: *Tsukahara* further teaches that the method includes calculating the logarithms of the absolute value of the inverse-transformed samples relative to an effective value of the inverse-transformed samples (see *Tsukahara*, column 7, lines 10-24 and Figs. 8A and 8B).

With regard to claims 5, 13, 20, 27, 31 and 34: *Tsukahara* further teaches that the frequency distribution of the logarithms as a function of the logarithmized level (see *Tsukahara*, Figs. 9A and 9B).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Fri (10:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on (571)-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Elias Desta
Examiner
Art Unit 2857

- E.D.

JEFFREY R WEST
EXAMINER - AU 2857

- November 21, 2007